

# PATENT ABSTRACTS OF JAPAN

**FILED**

(11)Publication number : 64-091022  
(43)Date of publication of application : 10.04.1989

(51)Int.Cl. G01J 1/02  
H01L 31/10  
H03F 3/08

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## (30)Priority

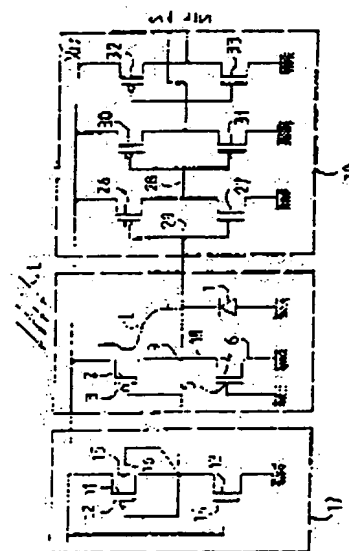
Priority number : 87 8712069 Priority date : 31.08.1987 Priority country : FR

## (54) LIGHT DETECTION CIRCUIT

### (57)Abstract:

**PURPOSE:** To properly detect exposure and to annul it by reverse-biasing the junction part of a light detection circuit with a current generator with a transistor(TR) that is biased in conduction limit state.

**CONSTITUTION:** When the junction of a diode 1 of a photodetector receives light L, its voltage-current characteristic curve rapidly changes. The junction part is biased in conduction limit state and is reverse-biased by a current generator TR2 that is driven in conduction limit state. When a saturation current in opposite direction extremely increases owing to the rapid change in voltage-current characteristic curve, the voltage between both terminals of the diode 1 drops. Therefore, the potential at a middle point 9 between TR2 and TR4 drops according to light and the potential drop is supplied and used as a light detection signal by a reproduction formation and usage circuit 10, thus detecting light exposure properly, annulling it as needed and preventing the elimination due to the light of the passivation layer of an integrated circuit and protecting the secret of, for example, a program.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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